

Employment Cost Index

Technical Note

The Employment Cost Index (ECI) is a quarterly index that measures the change in the cost of labor, free from the influence of employment shifts among occupations and industries. It measures that change for total compensation (wages, salaries, and employer costs for employee benefits), for wages and salaries only, and for benefit costs only.

Wages and salaries are defined as the hourly straight-time wage rate, or straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, and nonproduction bonuses such as lump-sum payments.

Benefits covered by the ECI are: Paid leave, supplemental pay, insurance benefits, retirement and savings benefits, legally required benefits, and other benefits.

The ECI provides data for the civilian economy, which includes the private economy and the public sector—excluding farms, private households, the self-employed and the Federal Government. Data are provided separately for the public and private sectors.

Each quarter, straight-time average hourly wage and salary rates and benefit cost data are collected from a probability sample. Data are collected for the pay period including the 12th day of the survey months of March, June, September, and December.

The sample establishments are classified by industry based on the 1987 *Standard Industrial Classification (SIC) Manual*, as defined by the U.S. Office of Management and Budget. Within an establishment, specific job categories are selected to represent broad occupational definitions. In 1996, some establishments in motor freight transportation and warehousing (SIC 42), transportation by air (SIC 45), and transportation services (SIC 47) were reclassified into air courier services (SIC 4513). These establishments were engaged in the delivery of letters, parcels, and packages, but were also operated as support establishments of enterprises that engaged in furnishing air delivery of individually addressed letters, parcels, and packages. Since the definition for SIC 4513 includes support establishments, these establishments were reclassified. For the ECI, these re-

classifications took effect in the June 1998 reference period.

Fixed employment weights are used each quarter to calculate the most aggregate indexes—civilian, private, and State and local governments. These fixed weights are also used to derive all of the industry and occupation series indexes. Since March 1995, the 1990 employment counts, primarily from the Bureau's Occupational Employment Survey, were used. From June 1986 to December 1994, employment counts from the 1980 Census were used as weights. Prior to June 1986, employment counts from the 1970 Census were used.

For the series based on bargaining status, region, and area size, employment data are not available from the Census. The employment weights are reallocated within these series each quarter based on the current ECI sample. The indexes for these series, consequently, are not strictly comparable to those for the aggregate, industry, and occupation series. A fuller explanation of the calculation of index numbers appears in the article, "Estimation Procedures for the Employment Cost Index," *Monthly Labor Review*, May 1982.

Beginning with the release of ECI data for March 1990, indexes were rebased to June 1989=100. Beginning with the release of ECI data for December 1990, seasonally adjusted data are available for selected ECI series. A description of the rebasing is available in "Employment Cost Index Rebased to June 1989," *Monthly Labor Review*, April 1990.

The costs per hour worked of compensation components, based on March data from the ECI, are published in a separate news release titled, "Employer Costs for Employee Compensation." The cost levels, which are published annually in mid-June, are calculated with current employment weights, rather than the fixed 1990 weights.

More detailed information on the ECI may be obtained by writing to the ECI, Division of Compensation Data Analysis and Planning, Bureau of Labor Statistics, 2 Massachusetts Ave. NE, Room 4175, Washington, DC 20212-0001.

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TABLE A-1. **Employment Cost Index for total compensation¹, wages and salaries, and benefit costs by industry and occupational group, selected periods, 1997-1998**

(Seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)		Percent changes for 3-months ended—							
	Sep. 1998	Dec. 1998	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998	Dec. 1998
TOTAL COMPENSATION										
Civilian workers	138.7	139.7	0.7	0.8	0.8	1.0	0.7	0.9	1.0	0.7
State and local government	138.6	139.5	.6	.5	.6	.6	.8	.7	.8	.6
Private industry	138.7	139.7	.6	.9	.8	1.0	.7	.9	1.1	.7
Industry										
Goods producing ²	137.1	137.9	.3	.9	.8	.4	.6	.9	.7	.6
Construction ³	133.1	134.6	.6	.8	.7	.5	.7	1.2	.5	1.1
Manufacturing	138.2	138.9	.3	.8	.7	.5	.7	.5	.9	.5
Durables	138.5	139.3	.2	.8	.7	.6	.5	.6	.9	.6
Nondurables	137.8	138.3	.4	.9	.8	.5	.9	.5	1.0	.4
Service producing ⁴	139.5	140.6	.8	.8	.9	1.3	.7	.9	1.3	.8
Transportation and public utilities ⁵	138.6	139.3	.4	.7	.8	1.0	1.0	1.3	.9	.5
Wholesale trade ³	140.8	143.0	1.4	.4	.8	.5	1.8	.4	1.8	1.6
Retail trade	135.6	135.6	1.1	.7	.9	.6	1.3	.7	.9	.0
Finance, insurance, and real estate ^{3,6}	141.0	142.5	2.1	.6	.9	3.1	1.6	1.2	1.9	1.1
Services	141.8	142.8	.7	.9	1.0	1.2	.4	.8	1.1	.7
Nonmanufacturing	138.8	139.9	.8	.8	.8	1.3	.7	1.0	1.2	.8
Occupational group										
White collar	141.1	142.2	.8	.8	.9	1.3	.8	.9	1.3	.8
Blue collar	135.1	136.1	.3	.8	.8	.7	.5	.8	.7	.7
Service ³	137.0	137.4	.9	.9	1.6	.5	1.0	.7	.9	.3
WAGES AND SALARIES										
Civilian workers	136.7	137.7	.8	.9	.9	1.1	.8	.9	1.2	.7
State and local government	137.1	138.2	.6	.6	.7	.8	.7	.7	.7	.8
Private industry	136.6	137.6	.9	.9	1.0	1.1	.8	1.0	1.3	.7
Industry										
Goods producing ^{2,6}	134.3	135.2	.6	1.1	.8	.5	1.1	.9	.8	.7
Construction ³	128.2	129.5	1.1	.9	.8	.6	1.0	1.3	.2	1.0
Manufacturing ⁶	136.0	136.8	.5	.9	.8	.7	1.1	.7	1.0	.6
Durables ⁶	135.9	136.9	.5	.9	.8	.5	1.1	.8	1.0	.7
Nondurables	136.1	136.9	.5	.9	.8	.9	1.1	.4	1.0	.6
Service producing ⁴	137.6	138.6	.9	.9	1.1	1.4	.8	1.0	1.5	.7
Transportation and public utilities ⁵	134.4	135.0	.8	.8	.9	.8	.5	.8	1.1	.4
Wholesale trade ³	139.3	141.3	1.6	.2	.8	.5	2.2	.2	1.8	1.4
Retail trade	135.0	134.8	1.0	1.0	.9	.7	1.1	1.0	1.3	-.1
Finance, insurance, and real estate ^{3,6}	138.1	139.8	1.9	.6	.9	3.3	1.5	1.7	2.4	1.2
Services	140.0	140.8	.9	1.1	1.2	1.1	.7	.9	1.2	.6
Nonmanufacturing	136.3	137.6	.9	.9	1.0	1.3	.8	1.0	1.2	1.0

See footnotes at end of table.

TABLE A-1. **Employment Cost Index for total compensation¹, wages and salaries, and benefit costs by industry and occupational group, selected periods, 1997-1998** — Continued

(Seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)		Percent changes for 3-months ended—							
	Sep. 1998	Dec. 1998	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998	Dec. 1998
WAGES AND SALARIES—Continued										
Occupational group										
White collar	139.0	140.1	0.9	0.9	1.1	1.3	0.9	1.0	1.5	0.8
Blue collar ⁶	132.4	133.2	.7	1.0	.8	.6	.9	.8	.8	.6
Service ³	134.4	135.0	.9	1.0	1.6	.7	1.0	.9	.8	.4
BENEFIT COSTS										
Civilian workers	143.8	144.6	.3	.5	.5	.8	.4	.8	.8	.6
State and local government	142.0	142.6	.4	.3	.3	.3	.8	.7	1.0	.4
Private industry	144.2	145.1	.1	.6	.5	.9	.3	.8	.7	.6
Industry										
Goods producing ²	143.0	143.5	-.1	.6	.6	.2	-.3	.6	.5	.3
Manufacturing	142.7	143.0	-.3	.8	.5	.4	-.4	.5	.4	.2
Service producing ⁴	144.9	146.0	.4	.6	.5	1.4	.6	.8	.8	.8
Nonmanufacturing	145.0	146.0	.4	.6	.5	1.1	.6	1.0	.8	.7
Occupational group										
White collar	146.4	147.8	.4	.5	.3	1.4	.5	.7	.6	1.0
Blue collar	140.9	141.6	.1	.4	.6	.2	.1	.8	.4	.5
Service ³	144.8	144.6	.8	.9	1.4	.2	1.1	.2	.8	-.1

¹ Includes wages, salaries, and employer costs for employee benefits.

² Includes mining, construction, and manufacturing.

³ Average standard errors (SE) for the unadjusted series upon which this series is based exceeded 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1997. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the

Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

⁴ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

⁵ Estimates for transportation and public utilities reflect the changes in SIC coding. See Technical Notes for further information.

⁶ No identifiable seasonality was found for this series.

TABLE A-2. **Employment Cost Index for total compensation¹ for civilian and State and local government workers by industry and occupational group, selected periods, 1997-1998**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Civilian workers	135.2	139.0	139.8	0.8	1.2	0.6	3.3	3.7	3.4
Excluding sales occupations	135.3	138.8	139.5	.8	1.0	.5	3.1	3.4	3.1
Industry									
Goods producing ²	134.1	137.2	137.9	.4	.7	.5	2.4	2.7	2.8
Manufacturing	135.3	138.2	138.9	.5	.7	.5	2.4	2.7	2.7
Service producing ³	135.5	139.6	140.4	1.0	1.4	.6	3.5	4.0	3.6
Services	137.6	140.8	141.7	.8	1.3	.6	3.3	3.2	3.0
Health services	137.9	139.1	139.1	.9	.4	.0	2.6	1.8	.9
Hospitals	136.7	139.4	140.2	.8	.9	.6	2.2	2.8	2.6
Educational services	137.0	140.2	141.0	.4	1.8	.6	2.3	2.7	2.9
Public administration ⁴	135.1	138.9	139.9	.7	1.1	.7	2.5	3.6	3.6
Nonmanufacturing	135.1	139.0	139.9	1.0	1.2	.6	3.5	3.9	3.6
Occupational group									
White collar	136.5	140.6	141.4	1.0	1.4	.6	3.5	4.0	3.6
Excluding sales	136.9	140.6	141.2	1.0	1.2	.4	3.4	3.7	3.1
Professional specialty and technical	136.7	140.0	141.0	.7	1.2	.7	2.7	3.1	3.1
Executive, administrative, and managerial ...	137.3	141.7	141.8	1.5	1.4	.1	4.4	4.7	3.3
Administrative support, including clerical	136.9	140.4	141.3	.8	.8	.6	3.2	3.4	3.2
Blue collar	132.4	135.3	136.1	.5	.7	.6	2.6	2.7	2.8
Service ⁵	135.6	139.4	140.0	.7	1.1	.4	3.5	3.6	3.2
State and local government	135.7	139.0	139.8	.5	1.5	.6	2.3	3.0	3.0
Industry									
Services	136.0	139.0	139.7	.4	1.8	.5	2.2	2.7	2.7
Excluding schools ^{5,6}	135.3	138.7	138.8	.7	1.8	.1	2.5	3.2	2.6
Health services	137.2	140.3	140.7	.9	1.7	.3	2.3	3.2	2.6
Hospitals	137.6	140.7	141.2	1.0	1.7	.4	2.5	3.2	2.6
Educational services	135.9	138.8	139.6	.4	1.7	.6	2.2	2.5	2.7
Schools	136.2	139.1	139.9	.4	1.8	.6	2.1	2.5	2.7
Elementary and secondary	135.8	138.8	139.3	.2	1.9	.4	2.0	2.4	2.6
Colleges and universities	137.2	140.1	141.5	.7	1.4	1.0	2.4	2.8	3.1
Public administration ⁴	135.1	138.9	139.9	.7	1.1	.7	2.5	3.6	3.6
Occupational group									
White collar	135.5	138.4	139.3	.5	1.6	.7	2.3	2.7	2.8
Professional specialty and technical	135.1	137.7	138.5	.4	1.5	.6	2.1	2.3	2.5
Executive, administrative, and managerial ...	136.4	140.4	141.6	.6	1.8	.9	2.6	3.5	3.8
Administrative support, including clerical	136.1	139.5	140.3	.6	1.7	.6	2.3	3.1	3.1
Blue collar	134.2	136.8	137.8	.7	1.2	.7	2.3	2.6	2.7
Service ⁵	137.8	143.0	143.4	.6	1.4	.3	2.5	4.4	4.1

¹ Includes wages, salaries, and employer costs for employee benefits.

² Includes mining, construction, and manufacturing.

³ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and public administration.

⁴ Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.

⁵ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1997. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

⁶ Formerly called hospitals and other services.

TABLE A-3. **Employment Cost Index for total compensation¹ for private industry workers by industry and occupational group, selected periods, 1997-1998**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Private industry workers	135.1	139.0	139.8	0.9	1.1	0.6	3.4	3.8	3.5
Excluding sales occupations	135.2	138.8	139.4	.8	.9	.4	3.4	3.5	3.1
Industry									
Goods producing²	134.1	137.1	137.8	.4	.7	.5	2.4	2.6	2.8
Excluding sales	133.6	136.5	137.2	.4	.7	.5	2.4	2.6	2.7
White collar	136.2	139.7	140.2	.4	.6	.4	2.5	3.0	2.9
Excluding sales	135.0	138.3	138.8	.4	.7	.4	2.2	2.8	2.8
Blue collar	132.8	135.5	136.3	.3	.7	.6	2.5	2.3	2.6
Construction ³	129.7	133.4	134.3	.0	.5	.7	2.6	2.9	3.5
Manufacturing	135.3	138.2	138.9	.5	.7	.5	2.4	2.7	2.7
White collar	136.7	140.1	140.5	.7	.7	.3	2.3	3.2	2.8
Excluding sales	135.3	138.3	138.7	.6	.7	.3	2.1	2.8	2.5
Blue collar	134.3	136.8	137.7	.4	.7	.7	2.4	2.3	2.5
Durables	135.7	138.5	139.2	.5	.8	.5	2.3	2.6	2.6
Aircraft manufacturing (SIC 3721)	136.9	139.3	139.7	-.7	.3	.3	-.4	1.1	2.0
White collar	134.3	137.4	136.6	-.2	.2	-.6	.4	2.1	1.7
Blue collar	139.6	140.8	143.4	-1.6	.5	1.8	-1.9	-.7	2.7
Nondurables	134.5	137.6	138.2	.6	.7	.4	2.7	2.9	2.8
Service producing⁴	135.3	139.6	140.5	1.1	1.3	.6	3.9	4.3	3.8
Excluding sales	136.1	140.0	140.6	1.2	1.1	.4	4.0	4.1	3.3
White collar	136.6	141.2	142.2	1.3	1.4	.7	4.2	4.7	4.1
Excluding sales	138.1	142.2	142.8	1.3	1.1	.4	4.1	4.3	3.4
Blue collar	130.9	134.3	134.8	.7	.8	.4	2.8	3.3	3.0
Service	133.9	137.0	137.8	.9	.9	.6	4.1	3.2	2.9
Transportation and public utilities ⁵	134.2	138.5	139.3	1.0	1.0	.6	2.9	4.2	3.8
Transportation ^{3,5}	133.4	136.7	137.3	1.0	1.3	.4	3.3	3.5	2.9
Public utilities	135.1	140.7	141.9	1.0	.7	.9	2.6	5.2	5.0
Communications	134.0	140.5	141.7	1.7	.9	.9	2.2	6.6	5.7
Electric, gas, and sanitary services	136.4	141.0	142.1	.3	.5	.8	3.0	3.7	4.2
Wholesale and retail trade	132.9	137.6	138.2	.4	1.3	.4	3.3	3.9	4.0
Excluding sales	134.0	138.1	138.8	.8	1.3	.5	3.9	3.8	3.6
Wholesale trade ³	135.1	140.8	142.8	.4	1.6	1.4	3.2	4.6	5.7
Excluding sales	135.4	140.0	141.2	.7	1.3	.9	3.4	4.1	4.3
Retail trade	131.7	135.9	135.6	.5	1.1	-.2	3.4	3.7	3.0
General merchandise stores ³	130.0	133.2	134.0	1.1	.2	.6	2.9	3.6	3.1
Food stores ³	129.4	133.7	132.7	-.3	.6	-.7	.8	3.0	2.6
Finance, insurance, and real estate ³	134.5	141.0	142.5	3.1	1.9	1.1	6.7	8.0	5.9
Excluding sales	137.6	143.2	143.3	3.1	1.3	.1	6.5	7.3	4.1
Banking, savings and loan, and other credit agencies ³	140.6	148.4	146.7	5.6	2.1	-1.1	9.8	11.5	4.3
Insurance ³	134.8	141.9	141.7	1.3	2.2	-.1	4.0	6.6	5.1
Excluding sales	138.6	141.6	142.5	.9	.5	.6	3.8	3.1	2.8
Services	138.5	141.8	142.7	1.1	1.1	.6	3.8	3.5	3.0
Business services ³	138.6	143.5	145.9	1.7	2.0	1.7	5.2	5.3	5.3
Health services	138.1	139.0	139.0	.8	.2	.0	2.7	1.5	.7
Hospitals	136.5	139.1	139.9	.8	.7	.6	2.1	2.7	2.5
Nursing homes	—	—	—	.8	1.0	.6	2.6	3.3	3.2
Educational services	142.6	147.0	147.7	.7	2.2	.5	3.3	3.8	3.6
Colleges and universities	143.7	147.8	148.5	.8	2.1	.5	3.3	3.7	3.3

See footnotes at end of table.

TABLE A-3. **Employment Cost Index for total compensation¹ for private industry workers by industry and occupational group, selected periods, 1997-1998** — Continued

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Industry—Continued									
Nonmanufacturing industries	134.7	138.9	139.7	1.1	1.2	0.6	3.8	4.2	3.7
White collar	136.5	141.1	142.0	1.2	1.4	.6	4.1	4.6	4.0
Excluding sales	137.9	142.0	142.7	1.2	1.1	.5	4.1	4.3	3.5
Blue collar	130.1	133.4	134.0	.5	.8	.4	2.7	3.1	3.0
Service	133.8	136.9	137.7	.8	.9	.6	4.0	3.2	2.9
Occupational group									
White collar	136.7	141.1	142.0	1.1	1.2	.6	3.8	4.4	3.9
Excluding sales	137.4	141.3	141.9	1.1	1.0	.4	3.7	4.0	3.3
Professional specialty and technical	137.8	141.6	142.6	.8	1.1	.7	3.1	3.6	3.5
Executive, administrative, and managerial ...	137.4	141.9	141.8	1.6	1.4	-.1	4.6	5.0	3.2
Sales ³	133.5	140.4	142.6	1.0	2.3	1.6	4.2	6.2	6.8
Administrative support, including clerical	137.0	140.6	141.4	.8	.7	.6	3.4	3.5	3.2
Blue collar	132.3	135.2	135.9	.5	.7	.5	2.6	2.7	2.7
Precision production, craft, and repair	131.9	135.4	136.1	.2	.7	.5	2.2	2.8	3.2
Machine operators, assemblers, and inspectors	133.0	135.7	136.8	.6	.7	.8	2.7	2.6	2.9
Transportation and material moving	128.9	130.7	130.7	.7	.6	.0	3.0	2.1	1.4
Handlers, equipment cleaners, helpers, and laborers	135.8	138.5	139.2	1.2	.7	.5	3.4	3.2	2.5
Service	134.1	137.3	138.0	.8	1.0	.5	4.0	3.2	2.9
Production and nonsupervisory occupations⁶	134.2	138.0	139.0	.8	1.0	.7	3.2	3.6	3.6

¹ Includes wages, salaries, and employer costs for employee benefits.

² Includes mining, construction, and manufacturing.

³ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1997. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

⁴ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

⁵ Estimates for transportation and public utilities reflect the changes in SIC coding. See Technical Notes for further information.

⁶ This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

NOTE: Dashes indicate data not available.

TABLE A-4. **Employment Cost Index for total compensation¹ for private industry workers by bargaining status, region, and area, selected periods, 1997-1998**

(Not seasonally adjusted data)

Bargaining status, region, and area	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Bargaining status									
Union	133.5	136.8	137.5	0.2	1.1	0.5	2.1	2.7	3.0
Blue-collar occupations	131.6	134.6	135.3	.3	1.0	.5	2.1	2.6	2.8
Goods-producing industries ²	132.5	135.6	136.5	.2	1.0	.7	2.1	2.5	3.0
Service-producing industries	134.5	138.0	138.5	.4	1.3	.4	2.1	3.0	3.0
Manufacturing	133.3	136.0	136.9	.2	1.0	.7	2.1	2.3	2.7
Blue-collar occupations	133.0	135.5	136.4	.3	1.0	.7	2.2	2.2	2.6
Nonmanufacturing	133.2	136.9	137.4	.2	1.2	.4	2.1	3.0	3.2
Nonunion	135.3	139.3	140.1	1.0	1.1	.6	3.8	4.0	3.5
Blue-collar occupations	132.6	135.5	136.3	.6	.6	.6	2.9	2.8	2.8
Goods-producing industries ²	134.7	137.7	138.3	.5	.6	.4	2.6	2.8	2.7
Service-producing industries	135.3	139.7	140.6	1.2	1.2	.6	4.2	4.5	3.9
Manufacturing	135.9	138.9	139.4	.6	.7	.4	2.6	2.8	2.6
Blue-collar occupations	134.8	137.4	138.3	.4	.5	.7	2.6	2.4	2.6
Nonmanufacturing	134.9	139.1	140.0	1.1	1.2	.6	4.1	4.3	3.8
Region³									
Northeast	135.0	138.7	139.5	.7	1.2	.6	3.0	3.5	3.3
South	134.6	137.6	138.1	1.6	.9	.4	3.8	3.8	2.6
Midwest	136.9	140.9	141.4	.5	.9	.4	3.6	3.5	3.3
West	133.4	138.5	140.0	.7	1.4	1.1	3.5	4.5	4.9
Area									
Metropolitan	135.1	139.1	139.8	.9	1.2	.5	3.4	3.9	3.5
Other	135.3	138.2	139.4	1.1	.8	.9	3.9	3.3	3.0

¹ Includes wages, salaries, and employer costs for employee benefits.

² Includes mining, construction, and manufacturing.

³ The regional coverage is as follows: Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest—Illinois, Indiana, Iowa,

Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

TABLE A-5. Employment Cost Index for wages and salaries for civilian and State and local government workers by industry and occupational group, selected periods, 1997-1998

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Civilian workers	132.8	136.8	137.7	0.9	1.3	0.7	3.8	4.0	3.7
Excluding sales occupations	132.8	136.6	137.3	.8	1.3	.5	3.7	3.7	3.4
Industry									
Goods producing ¹	130.6	134.4	135.2	.5	.8	.6	3.0	3.5	3.5
Manufacturing	132.2	136.0	136.8	.7	1.0	.6	3.0	3.6	3.5
Service producing ²	133.6	137.8	138.7	1.1	1.5	.7	4.0	4.2	3.8
Services	136.0	139.6	140.5	.9	1.5	.6	3.7	3.6	3.3
Health services	135.4	137.6	137.6	.8	.8	.0	3.0	2.5	1.6
Hospitals	133.6	136.4	137.1	.8	1.0	.5	2.4	2.9	2.6
Educational services	135.9	139.1	140.0	.4	1.9	.6	2.7	2.8	3.0
Public administration ³	131.4	134.8	135.9	.8	1.2	.8	2.9	3.5	3.4
Nonmanufacturing	132.8	137.0	137.8	1.0	1.4	.6	3.9	4.2	3.8
Occupational group									
White collar	134.3	138.8	139.7	1.0	1.5	.6	3.9	4.4	4.0
Excluding sales	134.8	138.8	139.5	1.0	1.3	.5	3.8	4.0	3.5
Professional specialty and technical	135.0	138.5	139.4	.7	1.4	.6	3.3	3.4	3.3
Executive, administrative, and managerial ...	135.6	140.5	140.3	1.6	1.6	-.1	4.8	5.2	3.5
Administrative support, including clerical	133.7	137.5	138.6	.8	1.0	.8	3.6	3.6	3.7
Blue collar	129.3	132.6	133.3	.7	.9	.5	3.1	3.3	3.1
Service ⁴	132.6	136.1	137.0	.8	1.2	.7	3.9	3.5	3.3
State and local government	134.4	137.6	138.5	.6	1.6	.7	2.7	3.0	3.1
Industry									
Services	135.3	138.4	139.2	.4	1.8	.6	2.6	2.7	2.9
Excluding schools ^{4,5}	134.4	137.8	138.2	.8	1.7	.3	3.0	3.4	2.8
Health services	135.3	138.7	139.2	1.0	1.6	.4	3.0	3.6	2.9
Hospitals	135.2	138.6	139.1	1.1	1.5	.4	3.0	3.7	2.9
Educational services	135.3	138.4	139.3	.4	1.9	.7	2.5	2.7	3.0
Schools	135.5	138.5	139.5	.4	1.8	.7	2.5	2.7	3.0
Elementary and secondary	135.7	138.7	139.3	.3	1.9	.4	2.5	2.5	2.7
Colleges and universities	134.6	137.7	139.6	.7	1.6	1.4	2.6	3.1	3.7
Public administration ³	131.4	134.8	135.9	.8	1.2	.8	2.9	3.5	3.4
Occupational group									
White collar	134.5	137.6	138.5	.6	1.8	.7	2.6	2.9	3.0
Professional specialty and technical	135.1	137.9	138.7	.5	1.7	.6	2.6	2.6	2.7
Executive, administrative, and managerial ...	134.1	138.0	139.3	.8	1.8	.9	3.0	3.7	3.9
Administrative support, including clerical	132.3	135.4	136.5	.7	1.6	.8	2.6	3.0	3.2
Blue collar	132.3	135.1	136.0	.8	1.2	.7	2.7	3.0	2.8
Service ⁴	135.2	139.2	140.0	.7	1.5	.6	3.2	3.7	3.6

¹ Includes mining, construction, and manufacturing.

² Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and public administration.

³ Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.

⁴ Average standard errors (SE) for the series exceed 0.3 percent for

3-month changes and 0.6 percent for 12-month changes for the five years ending December 1997. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

⁵ Formerly called hospitals and other services.

TABLE A-6. **Employment Cost Index for wages and salaries for private industry workers by industry and occupational group, selected periods, 1997-1998**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Private industry workers	132.3	136.6	137.4	1.0	1.3	0.6	3.9	4.3	3.9
Excluding sales occupations	132.4	136.3	136.9	.9	1.1	.4	3.8	3.9	3.4
Industry									
Goods producing ¹	130.6	134.3	135.2	.5	.8	.7	3.0	3.4	3.5
Excluding sales	130.0	133.6	134.4	.5	.8	.6	2.9	3.3	3.4
White collar	132.9	137.4	138.2	.5	.8	.6	2.9	3.9	4.0
Excluding sales	131.6	135.7	136.4	.5	.8	.5	2.7	3.7	3.6
Blue collar	129.2	132.3	133.3	.6	.8	.8	3.1	3.0	3.2
Construction ²	124.9	128.5	129.3	.2	.3	.6	3.4	3.0	3.5
Manufacturing	132.2	136.0	136.8	.7	1.0	.6	3.0	3.6	3.5
White collar	133.6	138.3	139.0	.6	1.1	.5	2.7	4.1	4.0
Excluding sales	132.2	136.3	137.1	.7	1.0	.6	2.6	3.8	3.7
Blue collar	131.2	134.3	135.3	.8	.9	.7	3.1	3.1	3.1
Durables	131.9	135.9	136.9	.5	1.0	.7	2.7	3.6	3.8
Aircraft manufacturing (SIC 3721)	134.0	137.2	138.3	.5	.2	.8	2.4	2.9	3.2
White collar	129.8	133.9	134.5	.4	.1	.4	2.6	3.6	3.6
Blue collar	139.6	141.0	143.2	.9	.4	1.6	1.8	1.9	2.6
Nondurables	132.6	136.0	136.8	.9	.8	.6	3.2	3.5	3.2
Service producing ³	133.1	137.6	138.4	1.2	1.5	.6	4.4	4.6	4.0
Excluding sales	133.9	137.9	138.5	1.2	1.2	.4	4.4	4.2	3.4
White collar	134.3	139.2	140.1	1.3	1.6	.6	4.5	5.0	4.3
Excluding sales	135.9	140.2	140.7	1.3	1.3	.4	4.6	4.5	3.5
Blue collar	128.9	132.4	132.9	.8	1.0	.4	3.3	3.5	3.1
Service	131.0	134.2	135.2	.9	.9	.7	4.3	3.4	3.2
Transportation and public utilities ⁴	131.3	134.3	135.1	.9	1.1	.6	3.4	3.2	2.9
Transportation ^{2,4}	129.5	132.4	132.9	.8	1.5	.4	3.8	3.0	2.6
Public utilities	133.5	136.5	137.8	1.1	.6	1.0	2.9	3.4	3.2
Communications	134.0	136.7	138.0	1.7	.7	1.0	2.8	3.7	3.0
Electric, gas, and sanitary services	132.9	136.3	137.4	.5	.5	.8	3.0	3.1	3.4
Wholesale and retail trade	131.6	136.6	137.0	.5	1.5	.3	3.6	4.4	4.1
Excluding sales	133.2	137.6	138.2	.8	1.5	.4	4.3	4.1	3.8
Wholesale trade ²	133.6	139.3	141.3	.5	1.6	1.4	3.1	4.7	5.8
Excluding sales	135.0	139.6	140.8	.8	1.3	.9	4.0	4.3	4.3
Retail trade	130.6	135.2	134.8	.5	1.4	-.3	3.8	4.1	3.2
General merchandise stores ²	128.4	132.2	133.0	1.3	.5	.6	3.0	4.3	3.6
Food stores ²	127.0	131.7	130.5	.2	.9	-.9	1.8	3.9	2.8
Finance, insurance, and real estate ²	130.6	138.1	139.8	3.3	2.4	1.2	6.9	9.3	7.0
Excluding sales	133.6	139.7	139.6	3.3	1.6	-.1	6.6	8.0	4.5
Banking, savings and loan, and other credit agencies ²	138.3	147.0	144.4	7.3	2.7	-1.8	11.7	14.0	4.4
Insurance ²	130.2	138.7	138.5	1.2	2.9	-.1	3.3	7.8	6.4
Excluding sales	133.7	136.6	137.9	.6	.7	1.0	3.1	2.8	3.1
Services	136.2	140.0	140.8	1.1	1.2	.6	4.4	3.9	3.4
Business services ²	137.3	141.8	144.1	1.8	1.9	1.6	5.5	5.1	5.0
Health services	135.4	137.5	137.4	.8	.7	-.1	3.0	2.4	1.5
Hospitals	133.2	135.8	136.5	.8	.8	.5	2.2	2.7	2.5
Nursing homes	—	—	—	.8	1.0	.5	3.1	3.9	3.7
Educational services	138.4	142.8	143.5	.4	2.3	.5	3.4	3.6	3.7
Colleges and universities	138.7	142.8	143.6	.7	2.2	.6	3.7	3.6	3.5

See footnotes at end of table.

TABLE A-6. **Employment Cost Index for wages and salaries for private industry workers by industry and occupational group, selected periods, 1997-1998** — Continued

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Industry—Continued									
Nonmanufacturing industries	132.1	136.5	137.4	1.1	1.3	0.7	4.2	4.4	4.0
White collar	134.1	138.9	139.8	1.3	1.5	.6	4.5	4.9	4.3
Excluding sales	135.5	139.8	140.3	1.3	1.2	.4	4.6	4.5	3.5
Blue collar	127.1	130.5	131.1	.6	.8	.5	3.2	3.2	3.1
Service	130.9	134.1	135.1	.9	.9	.7	4.3	3.4	3.2
Occupational group									
White collar	134.2	139.0	139.9	1.1	1.5	.6	4.3	4.7	4.2
Excluding sales	134.8	139.1	139.7	1.0	1.2	.4	4.2	4.3	3.6
Professional specialty and technical	134.8	138.7	139.7	.8	1.2	.7	3.8	3.7	3.6
Executive, administrative, and managerial ...	135.8	140.9	140.5	1.6	1.6	-.3	5.0	5.5	3.5
Sales ²	131.4	138.8	141.3	1.2	2.7	1.8	4.4	6.9	7.5
Administrative support, including clerical	133.9	137.9	138.9	.8	.9	.7	3.6	3.8	3.7
Blue collar	129.1	132.4	133.2	.6	.8	.6	3.2	3.2	3.2
Precision production, craft, and repair	128.7	132.3	133.0	.4	.8	.5	2.9	3.2	3.3
Machine operators, assemblers, and inspectors	130.6	133.8	134.9	.8	.8	.8	3.3	3.3	3.3
Transportation and material moving	125.1	127.6	127.8	.8	.9	.2	3.3	2.8	2.2
Handlers, equipment cleaners, helpers, and laborers	131.8	135.1	135.8	1.2	1.0	.5	3.7	3.8	3.0
Service	131.1	134.4	135.3	.9	1.1	.7	4.3	3.5	3.2
Production and nonsupervisory occupations⁵	131.2	135.2	136.4	.8	1.2	.9	3.7	3.9	4.0

¹ Includes mining, construction, and manufacturing.

² Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1997. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

³ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

⁴ Estimates for transportation and public utilities reflect the changes in SIC coding. See Technical Notes for further information.

⁵ This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

NOTE: Dashes indicate data not available.

TABLE A-7. **Employment Cost Index for wages and salaries for private industry workers by bargaining status, region, and area, selected periods, 1997-1998**

(Not seasonally adjusted data)

Bargaining status, region, and area	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Bargaining status									
Union	128.9	132.4	133.1	0.5	1.3	0.5	2.8	3.2	3.3
Blue-collar occupations	126.7	129.9	130.6	.6	1.1	.5	2.7	3.1	3.1
Goods-producing industries ¹	127.1	131.0	131.7	.4	1.2	.5	2.8	3.5	3.6
Service-producing industries	131.2	134.1	134.8	.6	1.4	.5	2.8	2.8	2.7
Manufacturing	128.6	132.2	133.0	.6	1.4	.6	2.7	3.4	3.4
Blue-collar occupations	128.4	131.4	132.4	.6	1.1	.8	2.7	3.0	3.1
Nonmanufacturing	129.1	132.4	133.1	.4	1.2	.5	2.9	3.0	3.1
Nonunion	133.0	137.4	138.3	1.1	1.3	.7	4.2	4.4	4.0
Blue-collar occupations	130.6	134.0	134.8	.7	.8	.6	3.4	3.3	3.2
Goods-producing industries ¹	132.0	135.7	136.5	.6	.7	.6	3.1	3.4	3.4
Service-producing industries	133.2	137.9	138.8	1.2	1.5	.7	4.5	4.8	4.2
Manufacturing	133.5	137.3	138.2	.7	.8	.7	3.0	3.5	3.5
Blue-collar occupations	133.0	136.2	137.2	.8	.8	.7	3.3	3.2	3.2
Nonmanufacturing	132.6	137.1	138.0	1.1	1.3	.7	4.4	4.6	4.1
Region²									
Northeast	131.6	135.4	136.4	.7	1.2	.7	3.1	3.6	3.6
South	133.0	136.5	136.7	1.8	1.2	.1	4.7	4.5	2.8
Midwest	133.0	137.5	138.0	.6	1.1	.4	4.2	4.0	3.8
West	131.2	136.7	138.4	.8	1.6	1.2	3.7	5.0	5.5
Area									
Metropolitan	132.3	136.9	137.7	.9	1.3	.6	3.8	4.4	4.1
Other	132.0	134.7	136.0	1.2	1.0	1.0	4.3	3.3	3.0

¹ Includes mining, construction, and manufacturing.

² The regional coverage is as follows: Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest—Illinois, Indiana, Iowa,

Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

TABLE A-8. Employment Cost Index for benefits for civilian, State and local government, and private industry workers by industry, occupational group, and bargaining status, selected periods, 1997-1998

(Not seasonally adjusted data)

Industry, occupational group, and bargaining status	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
Civilian workers	141.1	144.0	144.7	0.6	0.7	0.5	2.1	2.6	2.6
State and local government	138.6	142.1	142.7	.3	1.3	.4	1.3	2.8	3.0
Private industry	141.8	144.5	145.2	.7	.6	.5	2.3	2.6	2.4
Industry									
Goods producing ¹	141.5	143.0	143.2	.0	.4	.1	1.3	1.1	1.2
Service producing ²	141.4	144.9	145.7	1.1	.8	.6	2.9	3.6	3.0
Manufacturing	141.7	142.6	142.7	.2	.1	.1	1.4	.8	.7
Aircraft manufacturing (SIC 3721)	143.0	143.8	142.6	-3.1	.5	-.8	-5.7	-2.6	-.3
White collar ³	144.8	145.5	141.2	-1.4	.3	-3.0	-4.0	-.9	-2.5
Blue collar	139.6	140.7	144.0	-5.8	.9	2.3	-8.3	-5.1	3.2
Nonmanufacturing	141.5	145.0	145.8	.9	.8	.6	2.6	3.4	3.0
Occupational group									
White collar	143.4	146.6	147.4	1.0	.7	.5	2.6	3.2	2.8
Blue collar	139.0	141.0	141.6	.1	.4	.4	1.5	1.6	1.9
Service ³	142.0	144.7	144.8	.4	.7	.1	3.3	2.3	2.0
Bargaining status									
Union	142.0	145.0	145.5	-.1	.8	.3	.9	2.0	2.5
Nonunion	141.5	144.2	144.9	.9	.6	.5	2.7	2.9	2.4

¹ Includes mining, construction, and manufacturing.

² Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

³ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years

ending December 1997. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.